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DATE: Friday, March 03, 2006

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L2	p450 3a4 and crystal and x-ray	22
		<i>DB=USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L1	p450 3a4 and crystal and x-ray	5

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Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 6569461 B1

Using default format because multiple data bases are involved.

L1: Entry 1 of 5

File: USPT

May 27, 2003

US-PAT-NO: 6569461

DOCUMENT-IDENTIFIER: US 6569461 B1

TITLE: Dihydroxy open-acid and salts of HMG-CoA reductase inhibitors

DATE-ISSUED: May 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tillyer; Richard D.	Cranford	NJ		
Reider; Paul J.	Westfield	NJ		
Grabowski; Edward J. J.	Westfield	NJ		
Xu; Feng	Staten Island	NY		
Vega; Jose M.	Trappe	PA		
Asgharnejad; Mandana	Ambler	PA		

US-CL-CURRENT: [424/497](#); [424/400](#), [424/464](#), [424/465](#), [424/482](#), [424/490](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 2. Document ID: US 5420027 A

L1: Entry 2 of 5

File: USPT

May 30, 1995

US-PAT-NO: 5420027

DOCUMENT-IDENTIFIER: US 5420027 A

**\*\* See image for [Certificate of Correction](#) \*\***

TITLE: Methods and compositions for the expression of biologically active fusion proteins comprising a eukaryotic cytochrome P450 fused to a reductase in bacteria

DATE-ISSUED: May 30, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fisher; Charles W.	Dallas	TX		
Barnes; Henry J.	Chula Vista	CA		

Estabrook; Ronald W.

Dallas

TX

US-CL-CURRENT: 435/189; 435/252.3, 435/252.33, 435/320.1, 435/69.7, 536/23.2,  
536/23.4

## ABSTRACT:

Disclosed are methods and compositions for effecting bacterial expression of eukaryotic cytochrome P450 enzymes and fusion proteins comprising a eukaryotic P450 domain fused to a reductase enzyme domain in a biologically active form. Certain embodiments involve the expression of eukaryotic cytochrome P450.sub.17.alpha.-hydroxylase which is expressed in large amounts in an E. coli host in a biologically active form without the need for coexpression or admixture of a cytochrome P450 reductase. Methods and compositions are also disclosed for the construction of cytochrome P450 enzyme hybrids or fusion proteins, incorporating the N-terminal 9 amino acids from bovine 17.alpha.-hydroxylase, which will enable many eukaryotic cytochrome P450 enzymes or fusion proteins to be expressed in bacteria.

49 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC	Draw. De
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☐ 3. Document ID: GB 2408509 A

L1: Entry 3 of 5

File: EPAB

Jun 1, 2005

PUB-NO: GB002408509A

DOCUMENT-IDENTIFIER: GB 2408509 A

TITLE: Crystal structure of cytochrome P450 and uses thereof

PUBN-DATE: June 1, 2005

## INVENTOR-INFORMATION:

NAME	COUNTRY
TICKLE, IAN JAMES	GB
VONRHEIN, CLEMENS	GB
WILLIAMS, PAMELA ANN	GB
JHOTI, HARREN	GB
KIRTON, STEWART BRIAN	GB

INT-CL (IPC): C12 N 9/02; G01 N 33/53

EUR-CL (EPC): C12N009/02

## ABSTRACT:

CHG DATE=20050607 STATUS=O>A method of obtaining a representation of the three dimensional structure of a crystal of cytochrome P450 3A4 comprises providing the data of Table 3 (described herein) and constructing an electron density map. The structure obtained may be used in the analysis of the interaction of a molecular structure with a P450 structure. Methods of obtaining an electron density map by

obtaining an X-ray diffraction pattern of a crystal of a P450 protein and calculating the map using the structure phase data of Table 3 is also provided. Also disclosed are methods for determining the binding of compounds to P450 3A4, proteins having the binding cavity of P450 3A4 and the crystal structure of P450 3A4.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: WO 2005105842 A2, US 20050032119 A1

L1: Entry 4 of 5

File: DWPI

Nov 10, 2005

DERWENT-ACC-NO: 2005-151670

DERWENT-WEEK: 200575

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TITLE: Crystal of P450 3A4, useful for identifying candidate modulator of P450 3A4, assessing ability of compound to interact with P450 3A4 protein, obtaining representation of three-dimensional structure of crystal of cytochrome P450 3A4

INVENTOR: JHOTI, H; KIRTON, S ; TICKLE, I J ; VINKOVIC, D M ; VONRHEIN, C ; WILLIAMS, P A ; WILLIAMS, P

PRIORITY-DATA: 2001GB-0008214 (April 2, 2001), 2001GB-0008212 (April 2, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 2005105842 A2</u>	November 10, 2005	E	000	C07K014/80
<u>US 20050032119 A1</u>	February 10, 2005		371	G01N033/53

INT-CL (IPC): C07 K 14/80; G01 N 33/48; G01 N 33/50; G01 N 33/53; G06 F 19/00

ABSTRACTED-PUB-NO: US20050032119A

BASIC-ABSTRACT:

NOVELTY - A crystal of P450 3A4 (I), has an orthorhomobic space group 1222, a space group space group P21212, a resolution better than 3.1 Angstrom , and the structure defined by the coordinates (C1) fully defined in the specification plus or minus a root mean square deviation from the C alpha atoms of not more than 1.5 Angstrom .

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a computer-based method (M1) for the analysis of the interaction of a molecular structure with P450 structure, involves providing a structure comprising a three-dimensional representation of P450 3A4 or its portion, where the representation comprises all or a portion of (C1) plus or minus a root mean square deviation from C alpha atoms of not more than 1.5 Angstrom , providing a molecular structure to be fitted to P450 3A4 structure and its selected coordinates, and fitting the molecular structure to P450 3A4 structure;

(2) a compound (II) having the modified structure identified by (M1);

(3) obtaining (M2) a structure of a target P450 protein of unknown structure,

involves providing a crystal of the target P450;

(4) a computer-based method (M3) for the analysis of molecular structures, involves providing the coordinates of at least two atoms of P450 3A4 structure of (C1) plus or minus a root mean square deviation from the C alpha atoms of less than 1.5 Angstrom ;

(5) a computer-based method (M4) of rational drug design involves providing the coordinates of at least two atoms of P450 3A4 structure of (C1) plus or minus a root mean square deviation from the C alpha atoms of less than 1.5 Angstrom ;

(6) a computer system (III), intended to generate structures and/or perform optimisation of compounds which interact with P450 or its homolog or analog, complexes of P450 with compounds, or complexes of P450 homolog or analog with compounds;

(7) providing (M5) data for generating structures and/or performing optimisation of compounds which interact with P450 or its homolog or analog;

(8) a computer-readable storage medium (V) comprising a data storage material encoded with a first set of computer-readable data comprising a Fourier transform of at least a portion of the structural coordinates for the P450 protein defined by (C1) plus or minus a root mean square deviation from the C alpha atoms of not more than 1.5 Angstrom or its selected coordinates;

(9) co-crystal (VI) of P450 3A4 and a ligand;

(10) a chimeric protein (VII) having a binding cavity which provides a substrate specificity substantially identical to that of P450 3A4 protein, where the chimeric protein binding cavity is lined by several atoms which correspond to selected P450 3A4 atoms lining the P450 3A4 binding cavity, the relative positions of several atoms corresponding to the relative positions, as defined by (C1) of the selected P450 3A4 atoms;

(11) a compound (VIII) identified, produced or obtainable by (I); and

(12) a computer-based method for identifying a candidate modulator of P450 3A4, involves employing a three-dimensional structure of P450 3A4, or its selected coordinates, identifying the candidate modulator by designing or selecting a compound for interaction with the binding cavity.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Modulator of P450 3A4 (claimed).

USE - (I) is useful for identifying a candidate modulator of P450 3A4, which involves employing a three-dimensional structure of P450 3A4, its sub-domain, or its several atoms, to characterize at least one P450 3A4 binding cavity, and identifying the candidate modulator by designing or selecting a compound for interaction with the binding cavity. (I) is useful for determining the structure of a protein, which involves providing (C1) or its selected coordinates, and either positioning the coordinates in the crystal unit cell of the protein so as to provide a structure for the protein, or assigning nuclear magnetic resonance (NMR) spectra peaks of the protein by manipulating the coordinates. (I) is useful for modifying the structure of a compound in order to alter its metabolism by a P450, which involves fitting a starting compound to one or more coordinates of at least one amino acid residue of the ligand-binding region of P450, modifying the starting compound structure to increase or decrease its interaction with the ligand-binding region. The ligand-binding region includes at least 4 of the residues. (I) is useful for modifying the structure of a compound in order to alter its, or another

compounds, metabolism by P450, which involves fitting a starting compound to one or more coordinates of at least one amino acid residue of the peripheral binding region of P450, modifying the starting compound structure to increase or decrease its interaction with the peripheral binding region, where the peripheral binding region is defined as the P450 residues numbered as 213, 214 or 219. (I) is useful for designing the structure of a compound which binds to the peripheral binding region, in order to alter another compounds metabolism by P450, which involves fitting a starting compound to one or more coordinates of at least one amino acid residue of the peripheral binding region of P450, modifying the starting compound structure to increase or decrease its interaction with the peripheral binding region, where the peripheral binding region is defined as P450 residues numbered as 213, 214 or 219. The method further involves fitting a second compound to the ligand binding site of P450. (I) is useful for obtaining a representation of the three-dimensional structure of a crystal of cytochrome P450 3A4, which involves providing the data of (C1) or its selected coordinates, and constructing a three-dimensional structure representing the coordinates. (I) is useful for predicting three-dimensional structures of P450 homolog or analog of unknown structure, which involves aligning a representation of an amino acid sequence of a target P450 protein of unknown three-dimensional structure with the amino acid sequence of the P450 of (C1) to match homologous regions of the amino acid sequences, modeling the structure of the matched homologous regions of target P450 of unknown structure on the corresponding regions of P450 structure as defined by (C1), and determining a conformation for the target P450 of unknown structure which substantially preserves the structure of the matched homologous regions. (I) is useful for assessing the ability of a compound to interact with P450 3A4 protein which involves obtaining or synthesizing the compound, forming a crystallized complex of a P450 3A4 protein and the compound, the complex diffracting X-rays for the determination of atomic coordinates of the complex to a resolution of better than 2.8 Angstrom , and analyzing the complex by X-ray crystallography to determine the ability of the compound to interact with the P450 3A4 protein. The method involves identifying a molecular structure or modulator by (I) (all claimed). (VIII) is useful for treating cancer.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. D
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☐ 5. Document ID: JP 2006503912 W, WO 2004038015 A1, GB 2395718 A, AU 2003274378 A1, GB 2395718 B, GB 2408509 A, EP 1554380 A1, US 20050159901 A1

L1: Entry 5 of 5

File: DWPI

Feb 2, 2006

DERWENT-ACC-NO: 2004-440452

DERWENT-WEEK: 200611

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TITLE: Obtaining a representation of the 3-D structure of cytochrome P450 3A4 crystals, by providing data of structure factors used to generate electron density map of crystal structure and constructing electron density map of obtained data

INVENTOR: JHOTI, H; KIRTON, S B ; TICKLE, I J ; VONRHEIN, C ; WILLIAMS, P A

PRIORITY-DATA: 2003US-479448P (June 19, 2003), 2002US-421063P (October 25, 2002), 2001GB-0008212 (April 2, 2001), 2001GB-0008214 (April 2, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 2006503912 W</u>	February 2, 2006		179	C07K014/795

<u>WO 2004038015 A1</u>	May 6, 2004	E	357	C12N015/02
<u>GB 2395718 A</u>	June 2, 2004		000	C12N009/02
<u>AU 2003274378 A1</u>	May 13, 2004		000	C12N015/02
<u>GB 2395718 B</u>	January 19, 2005		000	C12N009/02
<u>GB 2408509 A</u>	June 1, 2005		000	C12N009/02
<u>EP 1554380 A1</u>	July 20, 2005	E	000	C12N015/02
<u>US 20050159901 A1</u>	July 21, 2005		000	G06F019/00

INT-CL (IPC): A61 K 35/00; A61 K 45/00; A61 P 39/00; A61 P 39/02; A61 P 43/00;  
C07 K 14/795; C07 K 14/80; C07 K 19/00; C12 N 9/02; C12 N 15/02; G01 N 15/00;  
G01 N 33/53; G06 F 17/50; G06 F 19/00; G06 G 7/48

ABSTRACTED-PUB-NO: WO2004038015A

BASIC-ABSTRACT:

NOVELTY - Obtaining (M1) a representation of the 3-dimensional structure of a crystal of cytochrome P450 3A4, involves providing the data (F1) of structure factors and phases used to generate electron density map of 3A4 crystal structures as given in specification, and constructing an electron density map of F1, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a computer-based method (M2) for the analysis of the interaction of a molecular structure with a P450 structure;
- (2) a compound (I) having the modified structure identified using (M2);
- (3) obtaining (M3) an electron density map of a target P450 protein of unknown structure;
- (4) determining (M4) whether a compound is bound to P450 3A4 protein;
- (5) determining an electron density map of a target protein which is, or is homologous to, 3A4, involves providing a crystal of the target protein, obtaining an X-ray diffraction of the protein, and generating an electron density map of the target protein by reference to the structure factor phase data of F1;
- (6) a computer-based method (M5) for the analysis of molecular structures;
- (7) a computer-based method (M6) of rational drug design;
- (8) identifying (M7) a candidate modulator of P450 3A4;
- (9) determining (M8) the structure of protein;
- (10) determining (M9) the structure of a compound bound to P450 protein;
- (11) a computer system (II), intended to generate structures and/or perform optimization of compounds which interact with P450, its homologs or analogs, complexes of P450 with compounds, or complexes of P450 homologs or analogs with compounds, comprising computer-readable data (CRD);
- (12) providing (M10) data for generating structures and/or performing optimization of compounds which interact with P450, its homologs or analogs complexes of P450 with compounds or complexes of P450 homologs or analogs with compounds, involves establishing communication with a remote device containing CRD, as defined for (II);

(13) a computer-readable storage medium (CR);

(14) crystal (III) of P450 3A4, having an orthorhombic space group I222, and unit cell dimensions 78 Angstrom , 100 Angstrom , 132 Angstrom , 90 deg. , 90 deg. , 90 deg. , with a unit cell variability of 5% in all dimensions, having a resolution better than 3.1 Angstrom ;

(15) a crystal of P450 protein having the structure defined by the coordinates of C1 plus or minus a root mean square deviation from the C alpha atoms of not more than 1.5 Angstrom ;

(16) predicting 3-dimensional structures of P450 homologs or analogs of unknown structure;

(17) a chimeric protein having a binding cavity which provides a substrate specificity substantially identical to that of P450 3A4 protein, where the chimeric protein binding cavity is lined by several atoms which correspond to selected P450 3A4 atoms lining the P450 3A4 binding cavity, the relative positions of the several atoms corresponding to the relative positions, as defined by C1 of selected P450 3A4 atoms;

(18) assessing the ability of a compound to interact with P450 3A4 protein;

(19) a compound (C2) identified, produced, or obtainable by (M6) or (M7); and

(20) a computer-based method for identifying a candidate modulator of P450 3A4, involves employing a 3-dimensional structure of P450 3A4, or its selected coordinates, where the 3-dimensional structure is defined by atomic coordinate data as defined C1, and identifying the candidate modulator by designing or selecting a compound for interaction with the binding cavity.

ACTIVITY - Cytostatic.

No biological data given.

MECHANISM OF ACTION - Modulator of P450 3A4 (claimed).

USE - (M1) is useful for obtaining representation of the 3-dimensional structure of a crystal of cytochrome P450 3A4, where the crystal structure is useful in modeling the interaction of a compound with the protein, and in drug design. (M2) or (M5)-(M9) is useful for preparing a composition, which involves identifying a molecular structure or modulator by the above-mentioned methods, and admixing the molecule with a carrier. (M2) or (M5)-(M9) is useful for producing a medicament, pharmaceutical composition or drug, which involves identifying molecular structure or modulator by the above-mentioned methods, and preparing a medicament, pharmaceutical composition or drug containing the optimized modulator molecule, where the compound or composition is useful in medicine (claimed).

A pharmaceutical composition comprising C2 and a carrier is useful for treating or preventing cancer.

ADVANTAGE - The 3A4 structure of (M1) is suitable for soaking in ligands and hence enables determination of complex structures. The residues in binding pocket are well resolved.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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Terms	Documents
p450 3a4 and crystal and x-ray	5

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**Search Results - Record(s) 1 through 22 of 22 returned.**☐ 1. Document ID: US 20050209246 A1**Using default format because multiple data bases are involved.**

L2: Entry 1 of 22

File: PGPB

Sep 22, 2005

PGPUB-DOCUMENT-NUMBER: 20050209246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050209246 A1

TITLE: Prodrugs of piperazine and substituted piperidine antiviral agents

PUBLICATION-DATE: September 22, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Ueda, Yasutsugu	Clinton	CT	US
Connolly, Timothy P.	Portland	CT	US
Kadow, John F.	Wallingford	CT	US
Meanwell, Nicholas A.	East Hampton	CT	US
Wang, Tao	Middletown	CT	US
Chen, Chung-Pin H.	Madison	CT	US
Yeung, Kap-Sun	Madison	CT	US
Zhang, Zhongxing	Madison	CT	US
Leahy, David Kenneth	Somerset	NJ	US
Pack, Shawn K.	Plainsboro	NJ	US
Soundararajan, Nachimuthu	Kendall Park	NJ	US
Sirard, Pierre	St. Jean sur Richelieu	CA	
Levesque, Kathia	Ste-Catherine	CA	
Thoraval, Dominique	Candiac	CA	

US-CL-CURRENT: [514/253.04](#); [514/81](#), [544/362](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC	Draw. D.
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☐ 2. Document ID: US 20050202405 A1

L2: Entry 2 of 22

File: PGPB

Sep 15, 2005

PGPUB-DOCUMENT-NUMBER: 20050202405

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050202405 A1

TITLE: Methods, compositions, and kits for protein crystallization

PUBLICATION-DATE: September 15, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Amshey, Joseph W.	Encinitas	CA	US
Diller, Tom	San Diego	CA	US
Rooney, Regina D.	La Jolla	CA	US

US-CL-CURRENT: 435/4; 204/450, 702/19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 3. Document ID: US 20050182243 A1

L2: Entry 3 of 22

File: PGPB

Aug 18, 2005

PGPUB-DOCUMENT-NUMBER: 20050182243

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050182243 A1

TITLE: Membrane scaffold proteins

PUBLICATION-DATE: August 18, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Sligar, Stephen G.	Urbana	IL	US
Bayburt, Timothy H.	Urbana	IL	US
Schuler, Mary A.	Urbana	IL	US
Civjan, Natanya R.	Urbana	IL	US
Grinkova, Ylena V.	Urbana	IL	US
Denisov, Ilia G.	Urbana	IL	US
Grimme, Stephen James	Urbana	IL	US

US-CL-CURRENT: 530/350

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 4. Document ID: US 20050164341 A1

L2: Entry 4 of 22

File: PGPB

Jul 28, 2005

PGPUB-DOCUMENT-NUMBER: 20050164341

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050164341 A1

TITLE: Methods of purification of cytochrome p450 proteins and of their crystallizing

PUBLICATION-DATE: July 28, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Cosme, Jose	Cambridge		GB
Ward, Alison	Cambridge		GB
Vuillard, Laurent	Cambridge		GB
Williams, Pamela	Cambridge		GB
Hamilton, Bruce	Cambridge		GB

US-CL-CURRENT: 435/69.1; 435/189

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC	Draw. De
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☐ 5. Document ID: US 20050159901 A1

L2: Entry 5 of 22

File: PGPB

Jul 21, 2005

PGPUB-DOCUMENT-NUMBER: 20050159901

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050159901 A1

TITLE: Crystal structure of cytochrome P450

PUBLICATION-DATE: July 21, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tickle, Ian J.	Cambridge		GB
Vonrhein, Clemens	Cambridge		GB
Williams, Pamela A.	Cambridge		GB
Kirton, Stewart B.	Cambridge		GB
Jhoti, Harren	Cambridge		GB

US-CL-CURRENT: 702/27; 514/2, 703/11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC	Draw. De
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☐ 6. Document ID: US 20050152984 A1

L2: Entry 6 of 22

File: PGPB

Jul 14, 2005

PGPUB-DOCUMENT-NUMBER: 20050152984

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050152984 A1

TITLE: Membrane scaffold proteins

PUBLICATION-DATE: July 14, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Sligar, Stephen G.	Urbana	IL	US
Bayburt, Timothy H.	Urbana	IL	US

US-CL-CURRENT: 424/499; 435/7.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. D.
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☐ 7. Document ID: US 20050119343 A1

L2: Entry 7 of 22

File: PGPB

Jun 2, 2005

PGPUB-DOCUMENT-NUMBER: 20050119343

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050119343 A1

TITLE: Dihydroxy open-acid salt of simvastatin

PUBLICATION-DATE: June 2, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tillyer, Richard D.	Cranford	NJ	US
Reider, Paul J.	Westfield	NJ	US
Grabowski, Edward J.J.	Westfield	NJ	US
Xu, Feng	Staten Island	NY	US
Wenslow, Robert M.	East Windsor	NJ	US
Vega, Jose M.	Trappe	PA	US
Varsolona, Richard J.	Scotch Plains	NJ	US

US-CL-CURRENT: 514/548; 560/180

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. D.
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☐ 8. Document ID: US 20050107342 A1

L2: Entry 8 of 22

File: PGPB

May 19, 2005

PGPUB-DOCUMENT-NUMBER: 20050107342

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050107342 A1

TITLE: Resistance-repellent retroviral protease inhibitors

PUBLICATION-DATE: May 19, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Erickson, John W.	Potomac	MD	US

Eissenstat, Michael	Frederick	MD	US
Silva, Abelardo	Ellicott City	MD	US
Gulnik, Sergei	Frederick	MD	US

US-CL-CURRENT: [514/81](#); [514/109](#), [514/418](#), [514/443](#), [514/469](#), [548/413](#), [548/484](#),  
[549/216](#), [549/5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 9. Document ID: US 20050101581 A1

L2: Entry 9 of 22

File: PGPB

May 12, 2005

PGPUB-DOCUMENT-NUMBER: 20050101581

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050101581 A1

TITLE: Therapeutic treatment methods 2

PUBLICATION-DATE: May 12, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Reading, Christopher L.	San Diego	CA	US
Ahlem, Clarence N.	San Diego	CA	US
Auci, Dominick L.	San Diego	CA	US
Dowding, Charles	San Diego	CA	US
Frincke, James M.	San Diego	CA	US
Li, Mei	San Diego	CA	US
Page, Theodore M.	Carlsbad	CA	US
Stickney, Dwight R.	Granite Bay	CA	US
Trauger, Richard J.	Leucadia	CA	US
White, Steven K.	San Diego	CA	US

US-CL-CURRENT: [514/178](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 10. Document ID: US 20050032119 A1

L2: Entry 10 of 22

File: PGPB

Feb 10, 2005

PGPUB-DOCUMENT-NUMBER: 20050032119

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050032119 A1

TITLE: Crystal structure of cytochrome P450

PUBLICATION-DATE: February 10, 2005

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tickle, Ian J.	Cambridge		GB
Vonrhein, Clemens	Cambridge		GB
Vinkovic, Dijana Matak	Cambridge		GB
Kirton, Stewart	Cambridge		GB
Williams, Pamela A.	Cambridge		GB
Jhoti, Harren	Cambridge		GB

US-CL-CURRENT: 435/7.1; 702/19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn De
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☐ 11. Document ID: US 20040243319 A1

L2: Entry 11 of 22

File: PGPB

Dec 2, 2004

PGPUB-DOCUMENT-NUMBER: 20040243319

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040243319 A1

TITLE: Crystal structure of cytochrome P450

PUBLICATION-DATE: December 2, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tickle, Ian J.	Cambridge		GB
Vonrhein, Clemens	Cambridge		GB
Williams, Pamela A.	Cambridge		GB
Kirton, Stewart B.	Cambridge		GB
Jhoti, Harren	Cambridge		GB

US-CL-CURRENT: 702/27; 514/2, 702/19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn De
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☐ 12. Document ID: US 20040138187 A1

L2: Entry 12 of 22

File: PGPB

Jul 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040138187

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040138187 A1

TITLE: Therapeutic treatment methods

PUBLICATION-DATE: July 15, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Reading, Christopher L.	San Diego	CA	US
Ahlem, Clarence N.	San Diego	CA	US
Auci, Dominick L.	San Diego	CA	US
Dowding, Charles	San Diego	CA	US
Frincke, James M.	San Diego	CA	US
Li, Mei	San Diego	CA	US
Page, Theodore M.	Carlsbad	CA	US
Stickney, Dwight R.	Granite Bay	CA	US
Trauger, Richard J.	Leucadia	CA	US
White, Steven K.	San Diego	CA	US

US-CL-CURRENT: 514/169

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 13. Document ID: US 20040132771 A1

L2: Entry 13 of 22

File: PGPB

Jul 8, 2004

PGPUB-DOCUMENT-NUMBER: 20040132771

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040132771 A1

TITLE: Compositions of cholesteryl ester transfer protein inhibitors and HMG-CoA reductase inhibitors

PUBLICATION-DATE: July 8, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Babcock, Walter C.	Bend	OR	US
Friesen, Dwayne T.	Bend	OR	US
Shankar, Ravi M.	Groton	CT	US
Smithey, Daniel T.	Bend	OR	US

US-CL-CURRENT: 514/311; 424/486

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 14. Document ID: US 20040053384 A1

L2: Entry 14 of 22

File: PGPB

Mar 18, 2004

PGPUB-DOCUMENT-NUMBER: 20040053384

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040053384 A1

TITLE: Membrane scaffold proteins

PUBLICATION-DATE: March 18, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Sligar, Stephen G.	Urbana	IL	US
Bayburt, Timothy H.	Urbana	IL	US
Schuler, Mary A.	Urbana	IL	US
Civjan, Natanya R.	Urbana	IL	US
Grinkova, Yelena V.	Urbana	IL	US
Denisov, Ilia G.	Urbana	IL	US

US-CL-CURRENT: 435/189

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 15. Document ID: US 20030219802 A1

L2: Entry 15 of 22

File: PGPB

Nov 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030219802

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030219802 A1

TITLE: Diagnosis and treatment of osteosarcoma

PUBLICATION-DATE: November 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Dhaini, Hassan R.	Ann Arbor	MI	US
Baker, Laurence H.	Ann Arbor	MI	US
Hollenberg, Paul F.	Ann Arbor	MI	US
Johnson, Timothy D.	Ann Arbor	MI	US
Thomas, Dafydd G.	Fenton	MI	US

US-CL-CURRENT: 435/6; 435/7.23

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 16. Document ID: US 20030211151 A1

L2: Entry 16 of 22

File: PGPB

Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030211151

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030211151 A1

TITLE: Dihydroxy open-acid and salts of HMG-Co-A reductase inhibitors

PUBLICATION-DATE: November 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tillyer, Richard D.	Cranford	NJ	US
Reider, Paul J.	Westfield	NJ	US
Grabowski, Edward J. J.	Westfield	NJ	US
Xu, Feng	Staten Island	NY	US
Vega, Jose M.	Trappe	PA	US
Asgharnejad, Mandana	Ambler	PA	US

US-CL-CURRENT: 424/468; 514/548

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 17. Document ID: US 20030176501 A1

L2: Entry 17 of 22

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030176501

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030176501 A1

TITLE: Dihydroxy open-acid salt of simvastatin

PUBLICATION-DATE: September 18, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Tillyer, Richard D.	Cranford	NJ	US
Reider, Paul J.	Westfield	NJ	US
Grabowski, Edward J. J.	Westfield	NJ	US
Xu, Feng	Staten Island	NY	US
Wenslow, Robert M.	East Windsor	NJ	US
Vega, Jose M.	Trappe	PA	US
Varsolona, Richard J.	Scotch Plains	NJ	US

US-CL-CURRENT: 514/548; 560/146

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 18. Document ID: US 20030171423 A1

L2: Entry 18 of 22

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030171423

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030171423 A1

TITLE: Resistance-repellent retroviral protease inhibitors

PUBLICATION-DATE: September 11, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Erickson, John W.	Frederick	MD	US
Eissenstat, Michael	Frederick	MD	US
Silva, Abelardo	Columbia	MD	US
Gulnik, Sergei	Frederick	MD	US

US-CL-CURRENT: [514/452](#); [514/469](#), [549/363](#), [549/395](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 19. Document ID: US 20030083231 A1

L2: Entry 19 of 22

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030083231

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030083231 A1

TITLE: Blood cell deficiency treatment method

PUBLICATION-DATE: May 1, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Ahlem, Clarence N.	San Diego	CA	US
Reading, Christopher	San Diego	CA	US
Frincke, James	San Diego	CA	US
Stickney, Dwight	Granite Bay	CA	US
Lardy, Henry A.	Madison	WI	US
Marwah, Padma	Middleton	WI	US
Marwah, Ashok	Middleton	WI	US
Prendergast, Patrick T.	Straffan		IE

US-CL-CURRENT: [514/2](#); [514/169](#), [514/173](#), [514/26](#), [514/44](#), [514/63](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 20. Document ID: US 20030060425 A1

L2: Entry 20 of 22

File: PGPB

Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030060425

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030060425 A1

TITLE: Immune modulation method using steroid compounds

PUBLICATION-DATE: March 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Ahlem, Clarence N.	San Diego	CA	US
Frincke, James M.	San Diego	CA	US
dos Anjos de Carvalho, Luis Daniel	Paio Pires	CA	PT
Heggie, William	Palmela	MD	PT
Prendergast, Patrick T.	County Kildare	CA	IE
Reading, Christopher L.	San Diego		US
Thadikonda, Krupakar Paul	Gaithersburg		US
Vernon, Russell N.	Oak Hills		US

US-CL-CURRENT: [514/26](#); [514/169](#), [514/173](#), [514/44](#), [514/63](#), [514/99](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. D
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☐ 21. Document ID: US 20020168771 A1

L2: Entry 21 of 22

File: PGPB

Nov 14, 2002

PGPUB-DOCUMENT-NUMBER: 20020168771

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020168771 A1

TITLE: Vectors having replication, immunogenicity and/or pathogenicity under stress promoter regulation and use thereof

PUBLICATION-DATE: November 14, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Gamerman, Gary Eric	Vienna	VA	US

US-CL-CURRENT: [435/456](#); [435/235.1](#), [435/320.1](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. D
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☐ 22. Document ID: US 20010034023 A1

L2: Entry 22 of 22

File: PGPB

Oct 25, 2001

PGPUB-DOCUMENT-NUMBER: 20010034023

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010034023 A1

TITLE: Gene sequence variations with utility in determining the treatment of disease, in genes relating to drug processing

PUBLICATION-DATE: October 25, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Stanton, Vincent P. JR.	Belmont	MA	US
Zillmann, Martin	Shrewsbury	MA	US

US-CL-CURRENT: 435/6; 702/20

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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